simple steps...to protect kids

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Environmental Health News for 5-Star Childcare Facilities

What's Bugging You?

In this Issue...

This newsletter is provided by the Indiana Department of Environmental Management for child care facilities participating in the 5-Star Environmental Recognition Program. This newsletter provides updates on environmental issues affecting children. Please feel free to use these articles in your own newsletters. We encourage you to post this in areas where parents will have access to it.

If you have any questions or comments about the information included here, please contact Karen Teliha at 800-988-7901.

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Sooner or later, we're all pestered by pests. Whether it's ants in the kitchen or weeds in the vegetable garden, pests can be annoying and bothersome. At the same time, many of us are concerned that the pesticides we use to control pests can cause problems too. How can pests be controlled safely? When and how should pesticides be used?

These questions are especially important at a childcare facility where many people, from parents to staff, watch your every move. The public's concerns about health and environmental risks associated with chemicals are increasing, particularly when children are involved. As parents become more aware of the health and environmental risks pesticides may pose, their interest in seeking the use of equally effective alternative pest control methods increases. Childcare administrators who have pest control decision-making responsibilities for buildings and grounds should become aware of the pest control options available to them. It is in everyone's best interest to reduce exposure to potentially harmful chemicals.

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5-Star Childcare Facilities hosted and attended first in the nation IPM work-shop

Monroe County United Ministries and Bloomington Developmental Learning Center, both 5 star child care facilities, played host this spring to several other facilities, government agencies, and schools, interested in learning how to reduce children's exposure to pesticides.

Both facilities were chosen as pilot centers to work on this two to three

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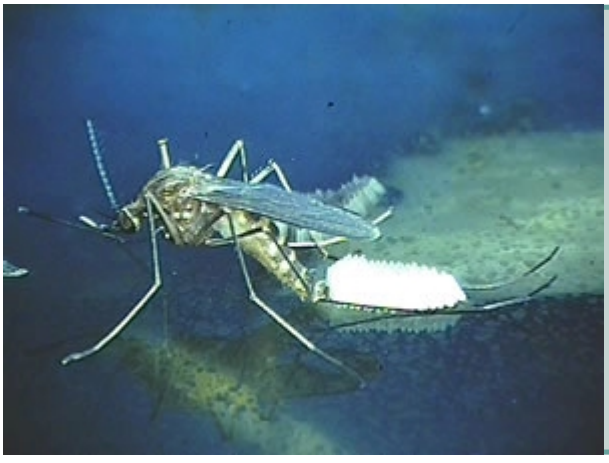

Cases of West Nile Virus found in Indiana

The West Nile Virus appears to be firmly established in the United States, and researchers expect its continued spread and entrenchment in wildlife populations. Twelve states - Illinois, Indiana, Ohio, New York, Connecticut, Massachusetts,

West Nile continued on page 4

Purdue University Offers Free Assistance for Child Care Providers with Pest Questions

Toll Free Pest Management Hotline

The IPM Technical Resource Center provides training and technical support for schools and childcare centers developing Integrated Pest Management policies and programs. Help is also available for pest management professionals working to provide IPM solutions to schools and childcare facilities.

Call the toll free IPM Hotline at 877-668-8IPM (8476)

IPM Hotline services include:

- Information about training opportunities for administrators and staff
- Information on developing pest management policies and guidelines
- Guidance on implementation of IPM in schools and childcare centers, including:
  - Exclusion
  - Sanitation
  - Monitoring
  - Pesticide selection and application strategies
  - Baiting and trapping
  - Record keeping

Can't get rid of a pest at your facility, call the IPM Hotline for free, personal assistance!

5 Ways to Eliminate Pests Without a Pesticide

1. Get organized. Clutter is the number one reason for pest infestations. Clutter provides cockroaches, ants, spiders, and mice with an undisturbed breeding habitat.

2. Get rid of cardboard. Cardboard boxes, particularly in kitchen areas, provide a favorite living place for cockroaches.

3. Keep all food products in sealed, plastic containers. Good food storage practices will discourage mice, cockroaches, and other pests from living in your kitchen.

4. Seal all doors, windows and cracks and crevices. Sealing the building provides energy savings and denies pests entry.

5. Clean deep. Sanitation is the key to eliminating flies and ants.

When hiring a pest control professional, childcare facilities need to do their homework

A child care facility can often control household pests through a combination of preventive measures, including proper sanitation. However, some pest infestations may be extensive or a particular pest may be difficult to control, requiring the services of a pest control operator (PCO).

Selecting a PCO should be like choosing any other service: look at value for the dollar spent. When you are using pesticides, cost should not be the only factor that determines which PCO you use. It is important to ensure that the PCO chosen is competent because both health and property can be damaged through the misuse of pesticides.

Before contracting with a PCO, consider the following.

PURCHASE PEST CONTROL SERVICES FROM A COMPETENT FIRM

To help in the selection of a pest control service, ask the following questions:

1. *"How many years have you been in business at your present location?"*
Contact the Better Business Bureau or the Indiana State Chemist's Office to determine if complaints have been filed against the PCO and determine the status of the complaints.

2. *"Would you provide me with a list of references?"*
Contact several references to find out if they are satisfied with the service provided by the PCO.

3. *"Will the person performing the services be a certified technician?"*

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BE AWARE OF FIRMS OR INDIVIDUALS THAT...

1. Want to do pest control as part of a package deal--such as general building repair or tree trimming--or will give you a special price if treatment is done immediately.

2. Do not have a listed or working telephone number.

3. Arrive unexpectedly and show you insects they have found in your neighbor's building as evidence of a neighborhood pest problem.

4. Sell services door-to-door.

5. Quote a per gallon price. Termite control jobs can require several hundred gallons of dilute insecticide.

6. Claim to have a special "secret" formula. Secret formulas are illegal. All products used for structural pest control must be registered by

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Five star continued from page 1

year project. They represent childcare facilities nationwide to assist experts as they learn more about how integrated pest management can be implemented in childcare. The day long workshop included tours of both facilities and opportunities to speak face to face with the directors and the IPM experts.

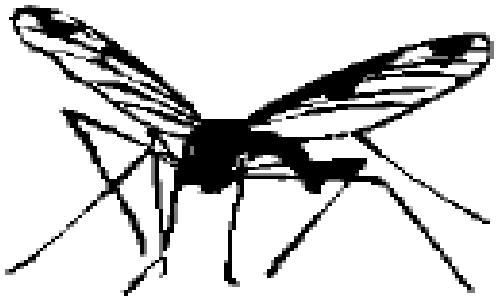
Also attending the workshop was the director of Cummins Child Development Center, another 5 star facility. Due to the success of this workshop, additional free workshops are being planned around the state. Stay tuned to learn about opportunities near you and prove that your facility is dedicated to providing the safest possible environment for children!

ATTENTION, READ THIS BOX!

Please ask your pesticide applicator to provide you with a list of the pesticides being used at your facility. If a product containing

Dursban, Diazinon, or organophosphate is being use, STOP USING IT IMMEDIATELY. These pesticides were banned from production by the U.S. Environmental Protection Agency due to their effect on children. Use gel baits and traps instead.

West Nile continued from page 1



New Jersey, Pennsylvania, Virginia, Georgia, Florida, and Louisiana - as well as the District of Columbia, have already reported dead birds that have tested positive for the virus in 2002. West Niles Virus was first identified in Indiana in late summer of 2001. Since then, 47 birds and one horse across Indiana from the following counties have tested positive for the virus: Clark, Floyd, Lake, Lawrence, Marion, Porter and Vanderburgh.

The West Nile Virus (WNV) is a mosquito-borne virus that can cause encephalitis (swelling of the brain) or meningitis (swelling of the membranes surrounding the brain and spinal cord). The virus is transmitted to humans, horses and other mammals by the bite of an infected mosquito - most commonly stagnant water species (Culex pipiens). The mosquito becomes infected by biting a bird that carries the virus. An infected mosquito can also spread the virus to a healthy bird. WNV is not transmitted by person-to-person or animal-to-person contact, nor can it be contracted directly from affected birds.

Call your local health department for questions regarding mosquito control and to report dead birds. Any dead crow, blue jay or raptor found between May 1 and the end of October that appears to have died of natural causes, should be reported to your local health department. The bird will be collected and sent to ISDH's laboratory for testing.

Text Provided by EPA, Indiana State Dept. of Health, and the National Biological Information Infrastructure

Some Ways To Reduce Your Risk Of Being Infected

Avoid outdoor activities between dusk and dawn when mosquitoes are likely to be biting.

If you must be outdoors when mosquitoes are active, cover up by wearing shoes, socks, long pants and long-sleeved shirts.

Apply mosquito repellent to exposed skin or on clothing. An effective repellant will contain DEET (N, N-diethyl-m-tolumide) as an active ingredient. Follow directions on the label for use, and take special precautions for children. Other repellents are less effective as studies have proved. Ultra-sonic devices, i.e. "bug zappers", and purple martins are not effective in preventing mosquito bites.

Maintain screening on windows and doors to keep mosquitos out of buildings.

Eliminate Mosquito Breeding Sites

- Remove all discarded tires from your property.
- Empty standing water from buckets, tin cans, plastic containers, flower pots, or similar water-holding containers.
- Make sure roof gutters drain properly, clean clogged gutters in the spring and fall. Clean and chlorinate swimming pools and hot tubs. If not in use, keep empty and covered. Drain water from pool covers.
- Change the water in bird baths at least once a week.
- Turn over plastic wading pools, and wheelbarrows, etc. when not in use.
- Eliminate any standing water that collects on your property.
- Encourage neighbors to eliminate breeding sites on their properties.
- Alert health authorities to potential breeding sites in your area.

Prevention and Control

Minimizing mosquito attacks on people is presently the only effective prevention of WNV. This may be achieved by following the guidance in the boxes on this page.

West Nile Virus (WNV) Frequently Asked Questions

What are the symptoms of infection?
Most people infected with the virus have no symptoms but, for the majority of those who do become ill, the infection is mild. Flu-like symptoms, which may appear 5-15 days after the bite of an infected mosquito, include; fever, body aches, skin rash and swollen lymph glands. The elderly and people with compromised immune systems are at a slightly greater risk of a severe infection (encephalitis) which is marked by a high fever, headaches, muscle weakness, convulsions, coma and, in rare cases, death. There is no vaccine or treatment for the disease.

If I live in an area where birds or mosquitoes with West Nile virus have been reported and a mosquito bites me, am I likely to get sick?
No. Even in areas where mosquitoes do carry the virus, very few mosquitoes—much less than 1%—are infected. If the mosquito is infected, less than 1% of people who get bitten and become infected will get severely ill. The chances you will become severely ill from any one mosquito bite are extremely small.

Is a woman's pregnancy at risk if she gets West Nile encephalitis?
There is no documented evidence that a pregnancy is at risk due to infection with West Nile virus.

Besides mosquitoes, can you get West Nile virus directly from other insects or ticks?
Infected mosquitoes are the primary source for West Nile virus. Although ticks infected with West Nile virus have been found in Asia and Africa, their role in the transmission and maintenance of the virus is uncertain. However, there is no information to suggest that ticks played any role in the cases identified in the United States.

Can infected dogs or cats be carriers (i.e., reservoirs) for West Nile virus and transmit the virus to humans?
West Nile virus is transmitted by infectious mosquitoes. There is no documented evidence of person-to-person, animal-to-animal, or animal-to-person transmission of West Nile virus.

How is West Nile encephalitis treated?
There is no specific therapy. In more severe cases, intensive supportive therapy is indicated, often involving hospitalization, intravenous fluids, airway management, respiratory support (ventilator), prevention of secondary infections (pneumonia, urinary tract, etc.), and good nursing care.

For additional information, call you local health department.

Avoiding Ticks and Lyme Disease

Lyme disease has become the leading tick-borne illness in the United States. In 1999, 16,273 cases of Lyme disease were reported to the Centers for Disease Control and Prevention (CDC). The deer tick, also known as the black-legged tick, is the species that most often transmits Lyme disease. With proper precautions, Lyme disease is preventable.

- Ticks are most active from April through October, so exercise additional caution when venturing into tick country during that time period.
- When in a tick-infested area, an insect repellent is good prevention is, however, consider using a product designed to be applied to clothing rather than skin.
- Tuck pants cuffs into boots or socks, and wear long sleeves and light-colored clothing to make it easier to spot ticks.
- Stay to the center of hiking paths, and avoid grassy and marshy woodland areas.
- Inspect yourself and your children for clinging ticks after leaving an infested area. Ticks are hard to see - nymphs are dot sized; adults, smaller than a sesame seed.
- If you discover a tick feeding, do not panic. Studies indicate that an infected tick does not usually transmit the Lyme organism during the first 24 hours.

Government Halts "Child Safe" Claims on Insect Repellants

1. What is DEET?

DEET (chemical name, N,N-diethyl-meta-toluamide) is the active ingredient in many insect repellent products. It is used to repel biting pests such as mosquitoes and ticks. Every year, approximately one-third of the U.S. population is expected to use DEET. Products containing DEET currently are available to the public in a variety of liquids, lotions, sprays, and impregnated materials (e.g., wrist bands). Formulations registered for direct application to human skin contain from 4 to 100% DEET. Except for a few veterinary uses, DEET is registered for use by consumers, and it is not used on food. DEET is designed for direct application to human skin to repel insects, rather than kill them.

2. What recent decision did EPA make concerning the use of DEET?

In 1998, EPA re-assessed DEET, and concluded that, as long as consumers follow label directions and take proper precautions, insect repellents containing DEET do not present a health concern. Human exposure is expected to be brief, and long-term exposure is not expected. Based on extensive toxicity testing, the Agency believes that the normal use of DEET does not present a health concern to the general population.

Most of the changes to DEET registrations required by EPA concern label directions and claims. As of the end of June 2002, all products that contain DEET must be properly labeled and can no longer claim the products are "child safe".

3. Why is EPA changing child safety claims on DEET product labels?

EPA is no longer allowing child safety claims on product labels. These claims had previously appeared on certain products containing a DEET concentration of 15% or less. The scientific data on DEET do not support product label claims of child safety based on the percentage of active ingredient. DEET's use has been implicated in seizures among children.

4. What should consumers do in the event of a potential reaction to DEET?

If you suspect that you or your child is having an adverse reaction to this product, discontinue use of the product, wash treated skin, and call your local poison control center or physician for help. If you go to a doctor, take the repellent container with you.

5. What benefits do DEET products offer?

DEET's most significant benefit is its ability to repel potentially disease-carrying insects and ticks. Studies submitted to EPA indicate that DEET repels ticks for about three to eight hours, depending on the percentage of DEET in the product. DEET products usually repel mosquitoes for several hours. However, repellents are effective only at short distances from the treated surface, so you may still see mosquitoes nearby. As long as you are not being bitten, there is no need to apply more repellant. DEET WILL NOT repel wasps, bees or other stinging insects.

Text Provided by EPA and ISDH

How to use DEET products safely:

Read and follow all directions and precautions on the product label.

Do not apply over cuts, wounds, or irritated skin.

Do not apply to hands or near eyes and mouth of young children.

Do not allow young children to apply this product.

Use just enough repellent to cover exposed skin and/or clothing.

Do not use under clothing.

Avoid over-application of this product.

After returning indoors, wash treated skin with soap and water.

Wash treated clothing before wearing it again.

Use of this product may cause skin reactions in rare cases.

Do not spray in enclosed areas.

To apply to face, spray on hands first and then rub on face. Do not spray directly onto face.

What Works and What Doesn't!

Spraying the yard with an insecticidal fog or mist is effective only for a short time. Mosquitoes will return when the effect of the spray has ended.

Installing bird or bat houses to attract insect-eating animals has been suggested as a method of mosquito control. However, there is little scientific evidence that this significantly reduces mosquito populations.

Likewise, insect light electrocutors, also known as bug zappers, do little to reduce mosquito biting in an area. Sound devices are completely ineffective at repelling mosquitoes.

The best way to prevent West Nile encephalitis and other mosquito-borne disease is to reduce the number of mosquitoes around the home and neighborhood.

During Summer, mosquitoes can develop in any standing water lasting more than seven to ten days. Ponds or streams where fish are present or the water is disturbed by current or wave action do not produce many mosquitoes. Mosquito larvae or "wrigglers" must live in still water for five or more days to complete their growth before changing into adult mosquitoes. Hundreds of mosquitoes can be generated by one discarded tire full of water.

Checklist for Controlling Mosquitos

You can protect your family from biting mosquitoes by reducing the amount of standing water available for mosquito breeding in or near your property:

- Repair failed septic systems.
- Keep grass cut short and shrubbery trimmed so adult mosquitoes cannot hide there.
- Dispose of old tires, cans, plastic containers, ceramic pots or other unused containers that can hold water. Drill a hole in the bottom of any tire used as a swing, so it cannot hold water. Do not overlook containers that have become overgrown by vegetation.

> Mosquitoes beat their wings 450 to 600 times per second.

- Fill in or drain any low places that can collect water, such as puddles or ruts.
- For those containers that must remain on your property, such as bird baths and wading pools, change the water at least once per week.
- Fill in tree holes and hollow stumps that hold water.
- Cover trash containers to keep out rainwater. Drill holes in the bottom of recycling containers that must be left outdoors. If holes are drilled in the sides of the containers sufficient water will collect to support mosquito breeding.
- Clean clogged roof gutters, particularly if leaves tend to plug up the drains. Flooded roof gutters are easily overlooked but can produce thousands of mosquitoes in a season.
- Repair leaky water pipes and outside faucets.
- Turn over wheelbarrows and plastic wading pools when not in use.

> Mosquitoes are considered the world's most dangerous insect.

- Store boats either covered or inverted, or else remove the water after each rain.
- Aerate ornamental pools or stock them with predatory fish. Water gardens may be fashionable, but they are major mosquito producers if the water stagnates.
- Clean and chlorinate swimming pools even if they are not being used. Mosquitoes can also breed in the water that collects on swimming pool covers.
- Keep drains, ditches and, culverts free of grass clippings, weeds and trash so water will drain properly.

Text Provided by ISDH

Continued from page 3

Each business must employ at least one state certified technician to use or oversee the use of pesticides. Call the Indiana State Chemist's Office to check the status of the certification.

4. *"Does your company hold a membership in a professional pest association?"*
These organizations promote continuing education and training in the pest control industry. The Indiana Pest Control Association is probably Indiana's most prominant one.

5. *"Would you provide me with a copy of your pest control license, insurance certificate and copies of labels for all pesticides that will be used?"*
Businesses are required to be state-licensed and maintain insurance coverage at all times. Pesticide labels will indicate how the product should be applied and the precautions to be taken.

Adapted from the Illinois Department of Public Health

KNOW THE TERMS OF SERVICE CONTRACTS
Some PCOs offer service contracts in which structures are routinely treated for a particular pest. These contracts may be necessary in some situations,

A cockroach can live a week without its head. The roach only dies because without a mouth, it can't drink water and dies of thirst.

such as a warehouse constantly receiving cartons that may contain cockroaches. In general, routine applications of pesticides ar not a good idea unless there is a constant infestation by a pest and non-chemical methods have failed to control the pest. Service contracts for childcare facilities should include periodic inspections and monitoring, but pesticides should not be applied unless the pests are actually present.

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the U.S. Environmental Protection Agency.

7. Try to panic you into immediately signing a contract by suggesting your building is structurally unsound.

8. Claim to have excess material left from a previous job and offer a reduced price for immediate treatment.

9. Claim to be endorsed by a government agency.

10. Want to spray your facility rather than use baits and traps. Most PCO's are moving away from spraying baseboards at childcare facilities due to possible health effects on children. Certain pests may require spraying, but under most conditions, including for roaches, baits will be just as if not more effective.

COOPERATION WITH THE PCO
Good cooperation between you and the PCO will help eliminate pests and reduce the use of pesticides. Remember clutter is the number one reason for pest infestations. If your facility has a lot of clutter, it will be nearly impossible for a PCO to control pests.

Bugging, continued from page 1

Integrated Pest Management (IPM) is an effective and environmentally sensitive approach to pest management that relies on a combination of commonsense practices. A basic knowledge of pest needs in combination with pest control methods is used to manage pest damage with the least possible hazard to people, property, and the environment.

Understanding pest needs is essential to implementing IPM effectively. Pests seek habitats that provide basic needs such as air, moisture, food, and shelter. Pest populations can be prevented or controlled by creating inhospitable environments, by removing some of the basic elements pests need to survive, or by simply blocking their access into buildings. Pests may also be managed by other methods such as traps, vacuums, or pesticides.

Once you understand that bugs look for the same things we do: air, water, food, and

shelter, you'll be able to think like a bug and figure out how to send them packing! So set some goals this summer to start an IPM program at your facility by using the checklist included in this newsletter!

Text Provided by EPA

Cochroaches

Introduction

All roaches need food and a source of water. Infestations are most likely in kitchens, teachers lounges, food storage areas and bathrooms. Once established, roaches use plumbing and electrical wires to move to other areas. German roaches will be the most common problem in Indiana.

Continuing re-infestations may be associated with food vendors or in some cases roaches are carried in by students. Roaches can mechanically carry bacteria and are a leading cause of allergy problems.

Control

Monitoring and thresholds

Sticky traps should be used to monitor problems. Place traps under refrigerators, dishwashers, and sinks. Traps should be monitored on a regular basis by staff or pest control people.

Treatment is needed only when a problem is discovered. All roach sightings need to be communicated to the IPM coordinator so proper treatment can be started before populations build.

Non-chemical control

Sanitation is important especially with the use of baits, but will not eliminate existing problems alone. Any food brought into classrooms can increase problems.

Repair leaking pipes, faucets, and other water sources and caulk all cracks.

All food including pet food in classrooms should be sealed tight, insect-proof fitting containers.

Garbage should be removed daily and sealed in plastic bags.

Try to eliminate corrugated cardboard storage boxes and other roach harborages.

Vacuuming in hiding places or freezing of small articles can be used in some situations to control roaches.

Chemical control

Cockroach problems are difficult and should be handled by a pest control operator (PCO). A thorough inspection should be done before treatment.

The use of baits and gels should be the primary treatments. Crack and crevice treatments will be more effective and cut down on exposure. After treatment some areas can be sealed or caulked.

Less toxic materials include insect growth regulators (IGR's) such as hydroprene and priproxyfen. IGR's take a few weeks to work.

Cleanout treatments should be scheduled in the summer when students are not present.

Did you know....some female cockroaches mate once and are pregnant for the rest of their lives!

IPM Action Points

Monitoring
Place sticky traps under refrigerators, dishwashers, and sinks.

Monitor traps on a regular basis

Sanitation
Sanitation will not eliminate a cockroach problem, but it will make treatment more effective and deter future infestations.

Place all food (and pet food) in glass or plastic containers with tight sealing lids.

Garbage should be removed at least daily

Wash out trash cans.

Vacuuming hiding places and freezing small objects will kill some cockroaches.

Pesticide Use
Very difficult, should be done by a pest control operator.

Do a thorough inspection before treatment

Baits and gels should be the primary treatments.

After treatment some areas can be sealed or caulked

ALWAYS read the label for proper use of a product

Adapted from Wisconsin's School IPM Manual

Ants

Introduction

There are three reasons why ants can become a problem; 1) worker ants coming inside for food or water, 2) winged reproductives (“the swarmers”), emerge inside, or 3) ants colonize and nest in walls or other structures within the building. Different species of ants feed on sugar, fat, or protein. Most species nest outside. Winged ants are “swarmers” - the kings and queens. Large numbers of winged ants indoors indicate an indoor infestation.

Common ants indoors in Wisconsin include pavement, cornfield, larger yellow, thief and carpenter ants. Ant problems in the winter indicate an indoor colony. Proper identification will help in finding the nesting site. Most ant problems do not require professional pest control help.

Control

Non-chemical control

General sanitation. Eliminate food sources. If an ant finds food they recruit hundreds more as long as food is available. If the food is removed ants will be forced to look elsewhere and should stop the habit of coming indoors.

Wash trash containers, recyclable items, clean up all spills.

Seal all food, especially sugar containing products in tight fitting glass or plastic containers.

Caulk entrances and points of entry to keep ants outdoors.

Winged ants can be cleaned up with a vacuum.

Chemical control

Special considerations - Ants live in colonies that may have thousands of individuals. Only the queens can lay eggs. To control ants you must find the nest and kill the queen. This can be done as a spot treatment or with baits that are taken back to the colony.

Soapy water will knock down workers that are present. Individuals can then be wiped up.

Ant baits are the preferred in schools. Workers will take poison back to the nest and feed it to the young and queen. Some ant baits are for sweet feeding ants, some for protein feeding ants, and some for both types. Active ingredients will include less toxic products such as boric acid, sulfuramid, abamectin, hydramethylnon and fipronil. Baits come in plastic stations, gels and pelleted baits. Different treatment sites will require different formulations.

If colonies are found they can be spot treated. In walls, insecticide dusts containing synthetic pyrethroids, boric acid, drione or silica aerogel can be used. For outdoor nests drenches, of labeled insecticides are the most effective. Use at least 1qt. of water to move mixture deep into soil where the queens are found. Disturb the site before treatment, drench, and then cover the surface with untreated soil. Synthetic pyrethoids can be used.

Adapted from Wisconsin’s School IPM Manual

IPM Action Points

Sanitation
Eliminate food sources

Store all food (pet food included) in glass or plastic containers with a tight sealing lid

Clean up all spilled food and drink

Ask that food not be kept overnight in lockers, desks, or drawers.

Trash receptacles

Remove trash that contains food at least daily

Wash all trash receptacles regularly.

Use ant trails

Find food sources and eliminate them

Find entrance points and eliminate them by caulking cracks and improving structures

Control options

Spraying ants with soapy water will kill them.

Ants can be vacuumed up

Pesticide use (If necessary)

Baits are preferred (they will kill a colony, otherwise ants will return)

If a colony can be found it can be spot treated with a spray or dust. If you can’t find the colony, these pesticides are of little use.

Head Lice

Introduction

Head lice only survive and breed on people. They are a medical problem and treatment should be left to parents and medical staff. Head lice cannot survive off their human host for more than 48 hours. Because of increased resistance to prescription and non-prescription treatments head lice have become more difficult to control, leading to more pressures on schools to provide treatments. **SCHOOLS SHOULD NOT BE SPRAYED TO CONTROL HEAD LICE.**

Control

Treatments in classroom

Sleeping mats, rugs and personal items (hats, dress-up clothes) can be placed into a freezer overnight to kill lice.

Vacuum furniture and floor rugs thoroughly.

Clothing (coats, hats etc.) can be isolated in individual plastic bags for each student.

Bagged articles can be placed in the freezer overnight or items can be left isolated for 21 days.

Washing of clothing in hot water and a hot dryer will kill lice. **Personal treatments**

Because treatments do not kill 100% of the eggs it is important to retreat within 10-14 days for control.

Nit combs are constructed to remove lice and eggs from the hair and are very effective if used properly.

The use of oils such as olive oil and coconut oil has shown promise if left on the hair for at least 8 hrs. Consult with student nurse or local public health nurse for more information.

All members of the family need to be checked for lice activity.
When problems are discovered in a classroom, all children should be inspected for active lice. Some school districts will demand a “no nit” policy and not allow students back into the classroom with any sign of lice.

Chemical control

CHEMICALS SHOULD NOT BE USED ANYWHERE IN SCHOOLS TO CONTROL LICE. Infestations are most likely from personal contact or sharing infested articles such as combs, brushes, and hats. School nursing staff can help educate parents as to proper louse control in the home.

IPM Action Points

PESTICIDES SHOULD NOT BE USED ANYWHERE IN SCHOOLS TO CONTROL LICE.

Lice will die within 48 hours without a human host. The following measures are precautionary for a school building.

Control measures at school:

Sleeping mats, pillows, rugs, and clothing can be placed in the freezer overnight (this will kill any lice present)

Vacuum furniture, carpeting, and rugs thoroughly

Isolate children’s clothing from each other in plastic bags

Washing clothes in hot water and a hot dryer will also kill lice.

Adapted from Wisconsin’s School IPM Manual

Wasps and Bees

Introduction

Most problems with wasps and yellow jackets will occur in the fall. Some species feed on sugar, meat, or other forms of protein. Wasps will be attracted to garbage cans, pop dispensers, dumpsters and other sources of food. If food is always present the wasps or yellow jackets will continue to come back to the site. In bad years it will be very difficult for children to eat or drink outdoors during the day without attracting yellow jacket workers. The biggest general threat is if a nest is disturbed because bees and wasps become very defensive. If the nest is in an area of people traffic and is in the ground, wall voids or on low-hanging branches it will need treatment. Bumble bee nests are often in-ground and can be treated like a wasp nest. Bumble bee, yellow jackets and paper wasps will freeze out by late October or early November. These species do not utilize the same nest next spring.

Look for nesting sites under bushes, in old rodent burrows, in hollow trees and other void spaces. Treating nests is more effective than treating individuals. Honey bees will be active in spring and will be in play areas if flowering plants and weeds are present. They are mild mannered and usually only pose a threat if handled. Do not allow children to walk bare footed in these areas. If honeybees are nesting in a building, the comb and honey will need to be cleaned out after the bees have been removed.

Control

Non-chemical control

All trash containers need tight-fitting lids or spring loaded doors. Trash should be emptied frequently.

Dumpsters should be washed on a regular basis to eliminate spilled food and liquids.

Seal entrances in walls to prevent void-nesting species.

Individual wasps can be killed with a fly swatter or use a small butterfly net. Captured individuals can be released outdoors or crushed.

Do not seal the nest entrance of an active nest until the nest is destroyed.

Foam sprays (Victor brand) can be used on nests.

Nests can be vacuumed. This should only be none by people with experience.

Chemical control

Treat nesting sites in the evening. Use protective clothing. If treated during the day the workers that are not in the nest will refuse to re-enter and will be agitated. **DO NOT treat when children are present.**

For above ground nests use aerosol sprays containing Pyrethrum or synthetic pyrethroids (allethrin, resmithrin, permethrin).

Nests high in trees should not be disturbed and do not need to be treated.

Ground nests or nests in walls should be treated with a dust formulation such as bendiocarb (Ficam), deltamethrin, pyrethrin, or cyfluthrin. Treat in early evening. The nest should be controlled by mid-day.

IPM Action Points

All trash containers need tight fitting lids or spring loaded doors.

Dumpsters and trash containers should be washed on a regular basis.

Seal entrances in walls to prevent wasps from nesting in the walls.

In buildings, individual wasps can be killed with a fly swatter or caught with a butterfly net and squashed or released.

Nests that can be disturbed by children should be destroyed.

Pesticides or foam sprays (Victor brand) can be used to treat nests.

Treat ground nests with a dust formulation.

Treat nesting sights in the evening. Otherwise all wasps will not be killed (some will be outside and probably will attack you).

Use protective clothing.

Adapted from Wisconsin's School IPM Manual